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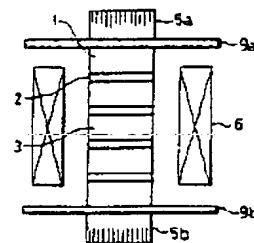
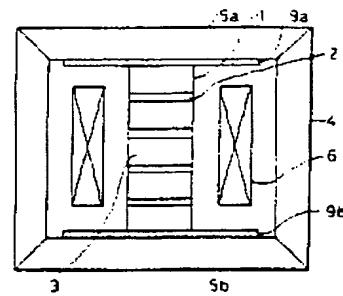
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TITLE : IRON CORE TYPE REACTOR WITH
GAP



ABSTRACT : PURPOSE: To reduce loss in a magnetic block itself in order to lower eddy current loss and stray loss due to leakage magnetic flux by inserting a magnetic block formed by sintering magnetic material powder to cover a winding between the end part of iron core legs and yoke iron core.

CONSTITUTION: Iron core legs 3 with gap are formed by stacking a plurality of block iron cores 1 with a magnetic gap 2 and plate type magnetic blocks 9a, 9b obtained by sintering and molding magnetic material powder are sandwiched from upper and lower yoke iron cores 5a, 5b at the upper and lower ends of the iron core legs 3 to cover a winding 6 together with the right and left side legs 4. Therefore, a volume resistivity of magnetic blocks 9a, 9b is as large as 10^6 or larger and an eddy current loss can be neglected for the magnetic flux of commercial frequency range. Accordingly, overheating of the magnetic blocks 9a, 9b are not considered as a problem and sufficiently plays a role for uniformly applying the magnetic flux in the ununiform distribution from the block iron core 1 and winding 6 to the yoke iron cores 5a, 5b. Thereby, loss in magnetic block itself is reduced and eddy current loss, stray loss due to magnetic flux can be lowered.

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